Innovative Multicultural Curricula for the Young EC and US Engineers and Scientists of the Year 2000 (IMCC)

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Partners:

Brunel University, , United Kingdom Çentro Politécnico Superior de la Universidad de Zaragoza, , Spain

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University of Oklahoma, Norman, OK University of Virginia, Charlottesville, VA

Vrije Universiteit Brussel/Université Libre de Bruxelles, Bruxelles, Belgium

EU-U.S. Atlantis Program

2000 Abstract

Specific objectives of this European Community /United States consortium are to: 1) promote transatlantic academic student mobility stressing both coursework and research; 2) develop research and industrial internships for students that provide academic credit; 3) promote faculty exchanges to develop collaborative research efforts that lead to enhanced exchange of students; and 4) lay the foundations for possible double-degree programs.

The primary innovations of this project are: 1) the integration of research collaboration to enhance the exchange of students for research, coursework, and industrial internships; 2) faculty involvement, in the form of direct research collaboration and research internships, to maintain the exchange programs well after the students have graduated; and 3) use of industrial internships to expose students to the business and work ethics of a different culture.

Since 1996, over one hundred students have participated including approximately 15 US students. Seven U.S. students have participated in industrial internships in France, Germany, and Great Britain, and two students have done research internships. One EC student has done an industrial internship in Texas, and over half of the EC students have engaged in research internships. Over 15 EC students from France and Italy have received M.S. degrees in the US consortia schools.

Since 1996, over ten US faculty members have traveled to the EC partner institutions to establish research ties. A Texas faculty member is on the dissertation committee of a French chemistry student who just received her PhD degree. IMCC supported travel expenses. The faculty member is currently spending six months in France collaborating with a French colleague under a grant from the French government. Another Texas faculty member spent a month in France and has submitted joint proposals to US funding agencies. From Oklahoma State University, a chemistry faculty member spent two months in France and another engineering faculty spent a month in Italy. These faculty exchanges/collaborations have helped to promote student mobility as well.

The IMCC consortium has established a program in Italy that combines language development and industrial internships. Our Italian partners established the program with leaders from the highly industrial Lecco area in northern Italy. Lecco representatives provide housing and industrial internships for students and the Politecnico di Milano uses the Lecco campus to provide language proficiency. This summer program attracted five US students this year. The consortium hopes to maintain this program and expand it to other partners.

Besides the yearly FIPSE evaluation, IMCC has a student evaluation form that asks students to rate the quality of the of preparation and host institution help, cultural education, academic education, research education, industrial internship education, and other factors. Results have been highly favorable.

The directors on both sides have made several presentations at FIPSE annual meetings. In addition the US director has made presentations about the IMCC program at the following meetings: EAIA International Conference, Barcelona Spain, Nov. 1997; 215th American Chemical Society National Meeting, Dallas Texas, May 1998; and the International Meeting on

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ONLINE REFERENCE:

http://www.engr.utexas.edu/grec/imcc/imcc.html http://www.engr.utexas.edu/grec/imcc/imcc.html

SUBJECTS:

- o o o Business and Economics
- o o o Engineering
- o o o International Education
- o o o Multicultural Curriculum
- o o o Natural Sciences

Subject Key:

- 0 0 0 Highly relevant
- o o Relevant
- Slightly relevant